

## CLAIMS

[0031] What is claimed is:

1. An apparatus comprising a media access controller to control communication substantially simultaneously with a plurality of remote units over a plurality of channels.
2. The apparatus of claim 1, further comprising a plurality of baseband processors associated with said plurality of channels, respectively.
3. The apparatus of claim 2, comprising a processor to process data for transmission by said media access controller.
4. The apparatus of claim 2, comprising a processor to process data received from said media access controller.
5. A wireless device comprising:
  - a media access controller to control communication substantially simultaneously with a plurality of remote units over a plurality of channels; and
  - a plurality of omni-directional antennas operably connected to said media access controller to transmit data over said plurality of channels, respectively.
6. The wireless device of claim 5, comprising a plurality of baseband processors associated with said plurality of channels, respectively.
7. The wireless device of claim 6, comprising a processor to process data for transmission by said media access controller.
8. The wireless device of claim 7, comprising a processor to process data received from said media access controller.
9. A method comprising:
  - switching a remote unit in communication with a media access controller from a first operating channel to a second

operating channel, wherein communication between said remote unit and said media access controller is substantially undisrupted.

10. The method of claim 9, comprising transmitting a channel switch request to said remote unit.

11. The method of claim 10, wherein transmitting a channel switch request comprises transmitting a parameter relating to a mode of communication between said media access controller and said remote unit.

12. The method of claim 10, wherein transmitting a channel switch request comprises transmitting a parameter relating to said second operating channel.

13. The method of claim 10, wherein transmitting a channel switch request comprises transmitting a parameter relating to a counter.

14. The method of claim 10, comprising receiving from said remote unit a communication responsive to said channel switch request.

15. The method of claim 14, wherein receiving said communication responsive to said channel switch request comprises receiving a positive reply.

16. The method of claim 14, wherein receiving said communication responsive to said channel switch request comprises receiving a negative reply.

17. The method of claim 14, wherein receiving said communication responsive to said channel switch request comprises receiving a request for a different channel.

18. The method of claim 9, wherein switching said remote unit comprises switching based on a parameter relating to a load of remote units communicating with said media access controller on at least one of said first and second channels.

19. The method of claim 18, wherein switching comprises switching communication between said remote unit and said media access controller from said first channel to said second channel if a load remote units communicating with said media access controller on said first channel is greater than a load of remote units communicating with said media access controller on said second channel.

20. The method of claim 9, wherein switching said remote unit comprises switching based on a parameter relating to deterioration in a signal transmitted between said media access controller and said remote unit.

21. A program storage device having instructions readable by a machine that when executed by the machine result in:

switching a remote unit in communication with a media access controller from a first operating channel to a second operating channel, wherein communication between said remote unit and said media access controller is substantially undisrupted.

22. The program storage device of claim 21, wherein said instructions result in transmitting a channel switch request to said remote unit.

23. The program storage device of claim 22, wherein said instructions result in transmitting a parameter relating to a mode of communication between said media access controller and said remote unit.

24. The program storage device of claim 22, wherein said instructions result in transmitting a parameter relating to said second operating channel.

25. The program storage device of claim 22, wherein said instructions result in transmitting a parameter relating to a counter.

26. The program storage device of claim 21, wherein said instructions result in switching based on a parameter related to a load of remote units communicating with said media access controller on at least one of said first and second channels.

27. The program storage device of claim 26, wherein said instructions result in switching communication between said remote unit and said media access controller from said first channel to said second channel if a load remote units communicating with said media access controller on said first channel is greater than a load of remote units communicating with said media access controller on said second channel.

28. The program storage device of claim 21, wherein said instructions result in switching based on a parameter relating to deterioration in a signal transmitted between said media access controller and said remote unit.

29. A system comprising:

- an access point able to transmit data to a plurality of remote units on a plurality of operating channels; and

- a plurality of remote units able to receive said data,

- wherein said access point is able to switch one of said plurality of remote units from a first operating channel to a second operating channel substantially without disrupting communication between said access point and said remote unit.

30. The system of claim 29, wherein said access point comprises:

- a media access controller; and

- a plurality of transceivers operably connected to said media access controller to transmit data to said remote units.

31. The system of claim 30, wherein said access point comprises a processor to provide to said media access controller data for transmission to said remote units.

32. The system of claim 29, wherein said access point is able to switch one of said plurality of remote units from a first operating channel to a second operating channel based on a parameter related to a load of remote units communicating with said access point on at least one of said first and second channels.

33. The system of claim 29, wherein said access point is able to switch one of said plurality of remote units from a first operating channel to a second operating channel based on a parameter related to deterioration of a signal transmitted between said media access controller and said remote unit.